



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,085	03/10/2004	David C. Sherrington	PU0327	8675

22840 7590 10/17/2005

AMERSHAM BIOSCIENCES  
PATENT DEPARTMENT  
800 CENTENNIAL AVENUE  
PISCATAWAY, NJ 08855

EXAMINER

THERKORN, ERNEST G

ART UNIT	PAPER NUMBER
----------	--------------

1723

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/800,085

Applicant(s)

SHERRINGTON ET AL.

Examiner

Ernest G. Therkorn

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-18 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, drawn to a method of making a medium, classified in class 210, subclass 656.
- II. Claims 10-18, drawn to an aggregate, classified in class 210, subclass 198.2.

The inventions are distinct, each from the other because:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed could be made by another and materially different process. For example, the product as claimed could be made by gluing particles together.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Royal N. Ronning, Jr. on October 6, 2005 an election was made with traverse to prosecute the invention of Group II, claims 10-18. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-9 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Art Unit: 1723

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-17 are rejected under 35 U.S.C. 102(B) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Afeyan (U.S. Patent No. 5,019,270). The claims are considered to read on Afeyan (U.S. Patent No. 5,019,270). However, if a difference exists between the claims and Afeyan (U.S. Patent No. 5,019,270), it would reside in optimizing the elements of Afeyan (U.S. Patent No. 5,019,270). It would have been obvious to optimize the elements of Afeyan (U.S. Patent No. 5,019,270) to enhance separation.

Claims 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Afeyan (U.S. Patent No. 5,019,270) in view of Sucholeiki (U.S. Patent No. 6,423,410). At best, the claims differ from Afeyan (U.S. Patent No. 5,019,270) in reciting use of synthetic polymer. Afeyan (U.S. Patent No. 5,019,270) (column 17, lines 26-32 and 38-44) itself discloses the particles are interadhered and the interadhesion may be done during polymerization. Sucholeiki (U.S. Patent No. 6,423,410) (Abstract, lines 2-5 and column 4, line 66-13) discloses that higher levels of crosslinking the aggregates

Art Unit: 1723

together enhances particle stability. It would have been obvious to use synthetic polymer in Afeyan (U.S. Patent No. 5,019,270) because Afeyan (U.S. Patent No. 5,019,270) (column 17, lines 26-32 and 38-44) itself discloses the particles are interadhered and the interadhesion may be done during polymerization and Sucholeiki (U.S. Patent No. 6,423,410) (Abstract, lines 2-5 and column 4, line 66-13) discloses that higher levels of crosslinking the aggregates together enhances particle stability.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Afeyan (U.S. Patent No. 5,019,270) alone or Afeyan (U.S. Patent No. 5,019,270) in view of Sucholeiki (U.S. Patent No. 6,423,410) as applied to claims 10-17 and 11-17 above, and further in view of either Goto (U.S. Patent No. 6,645,901) or Fuchs (U.S. Patent No. 5,246,577). At best, the claim differs from either Afeyan (U.S. Patent No. 5,019,270) alone or Afeyan (U.S. Patent No. 5,019,270) in view of Sucholeiki (U.S. Patent No. 6,423,410) in reciting heat fusion. Goto (U.S. Patent No. 6,645,901) (column 1, lines 34-43) discloses the heat of polymerization causes fusion and aggregation. Fuchs (U.S. Patent No. 5,246,577) (column 3 lines 26-28) discloses that it is well known to create a larger product by heat fusing particles. It would have been obvious that either Afeyan (U.S. Patent No. 5,019,270) alone or Afeyan (U.S. Patent No. 5,019,270) in view of Sucholeiki (U.S. Patent No. 6,423,410) heat fuses either because Goto (U.S. Patent No. 6,645,901) (column 1, lines 34-43) discloses the heat of polymerization causes fusion and aggregation or because Fuchs (U.S. Patent No. 5,246,577) (column 3 lines 26-28) discloses that it is well known to create a larger product by heat fusing particles.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Afeyan (U.S. Patent No. 5,019,270) alone or Afeyan (U.S. Patent No. 5,019,270) in view of Sucholeiki (U.S. Patent No. 6,423,410) as applied to claims 1-17 above, and further in view of Hagen (U.S. Patent No. 5,738,790). At best, the claim differs from either Afeyan (U.S. Patent No. 5,019,270) alone or Afeyan (U.S. Patent No. 5,019,270) in view of Sucholeiki (U.S. Patent No. 6,423,410) in reciting use of a membrane. Hagen (U.S. Patent No. 5,738,790) (column 4, line 66-column 5, line 11 and column 5, lines 55-61) discloses that it is desirable to use aggregates in membranes used for separation. It would have been obvious to use either Afeyan (U.S. Patent No. 5,019,270) alone's or Afeyan (U.S. Patent No. 5,019,270) in view of Sucholeiki (U.S. Patent No. 6,423,410)'s particles in a membrane because Hagen (U.S. Patent No. 5,738,790) (column 4, line 66-column 5, line 11 and column 5, lines 55-61) discloses that it is desirable to use aggregates in membranes used for separation.


Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (571) 272-1149. The official fax number is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Application/Control Number: 10/800,085  
Art Unit: 1723

Page 6

Business Center (EBC) at 866-217-9197 (toll-free).

  
**Ernest G. Therkorn**  
**Primary Examiner**  
**Art Unit 1723**

EGT  
October 7, 2005